

CLAIMS

1. A method of positioning a radio transmitter c h a r -
a c t e r i z e d i n that distance to a receiver of
known position is determined according to a parameter re-
flecting propagation delay time and that direction from the
5 receiver to the transmitter is determined from a respective
a parameter reflecting received signal level in a
cell/sector where the transmitter is camping or being
served and signal level in a co-sited cell/sector.
2. The method according to claim 1 c h a r a c t e r -
10 i z e d i n that the co-sited cell/sector is at least one
of the cells/sectors being immediate neighbors of the cell
where the transmitter is camping or being served.
3. The method according to claim 1 c h a r a c t e r -
i z e d i n that direction to the transmitter is deter-
15 mined by forming a linear scale ratio of or dB-scale dif-
ference between the neighbor cell/sector received level and
received level of the cell/sector where the transmitter is
camping or being served.
4. The method according to claim 1 c h a r a c t e r -
20 i z e d i n that determination of transmitter positioning
includes cell/sector identity.
5. The method according to claim 1 c h a r a c t e r -
i z e d i n that the received signal level is averaged
prior to forming a basis for positioning.
- 25 6. The method according to claim 5 c h a r a c t e r -
i z e d i n that the average is formed in a network con-
trol element.
7. The method according to claim 6 c h a r a c t e r -
i z e d i n that the network control element is an entity

most closely connected to the receiver entity over a standardized interface.

8. The method according to claim 7 characterized in that the entity most closely connected to the receiver is a base station controller.

9. The method according to claim 7 characterized in that the entity most closely connected to the receiver is a radio network controller.

10. A device of positioning a radio transmitter characterized by processing means for determining distance to a receiver of known position according to a parameter reflecting propagation delay time and direction from the receiver to the transmitter from a respective parameter reflecting received signal level in a cell/sector where the transmitter is camping or being served and signal level in a co-sited cell/sector.

11. The device according to claim 10 characterized in that the co-sited cell/sector is at least one of the cells/sectors being immediate neighbors of the cell where the transmitter is camping or being served.

12. The device according to claim 10 characterized in that direction to the transmitter is determined by forming a ratio of the neighbor cell/sector received level and received level of cell/sector where the transmitter is camping or being served.

13. The device according to claim 10 characterized by the processing means including cell/sector identity determination of transmitter positioning.

14. The device according to claim 10 characterized by the processing means forming a time average

of received signal level prior to forming a basis for positioning.

15. The device according to claim 14 characterized in that the average is formed in a network control element.

16. The device according to claim 15 characterized in that the network control element is an entity most closely connected to the receiver entity over a standardized interface.

10 17. The device according to claim 16 characterized in that the entity most closely connected to the receiver is a base station controller.

18. The device according to claim 16 characterized in that the entity most closely connected to the receiver is a radio network controller.

19. Radio communication system characterized by means for carrying out the method in any of claims 1-9.

20. Radio communication system characterized by a plurality of devices in any of claims 10-18.